

REMARKS

Claims 1-10 are pending in the current application. Claims 1, 6, and 7 are independent claims. Applicants submit that new dependent claims 8-10 have complete support in the specification and figures, and no new matter has been added.

Allowable Subject Matter

Initially, Applicants wish to thank the Examiner for acknowledging the allowable subject matter contained in dependent claim 5.

Specification

The Examiner objects to the specification due to several informalities. Applicants respectfully submit a substitute specification, and further submit that all objections raised by the Examiner have been corrected.

Claim Objections

The Examiner objects to claim 5 because of several informalities. Applicants amended claim 5 with regard to the Examiner's suggestions. Thus, withdrawal of the objection is requested.

Claim Rejections-35 U.S.C § 103

Claims 1, 4, 6, and 7 stand rejected under 35 U.S.C § 103(a) as being unpatentable over Mayer et al. (US 4,241,973, hereinafter Mayer) in view of Maxwell (US 2,880,403, hereinafter Maxwell). Applicants respectfully traverse this art ground of rejection.

Mayer

Mayer is directed to a cable terminal connector which includes means for securing a terminus of a grounding or shielding conductor of a coaxial-type cable within a body of dielectric material. Mayer further discloses the junction of the grounding or shielding conductor with the dielectric material is characterized by a means for distributing and lessening the intensities of mechanical or electrical stresses that may occur at the junction during use in transmitting a high VC voltage (Abstract).

Particularly, Mayer discloses an apparatus for terminating a typical coaxial cable. Mayer further discloses a brief description of a typical coaxial cable, and an example application for a tri-axial cable. Mayer discloses that a tri-axial cable may include two center conductors and an outer conductor. Mayer also discloses that the first and third conductor of the tri-axial cable are used in the same manner as a typical coaxial cable. More specifically, the second conductor of a tri-axial cable may carry a potential that is an intermediate value of the high voltage and ground potentials. This second, or middle, conductor may function as a guard potential shield that provides additional protection from stray capacitive effects. (Column 10, lines 45-70)

The Examiner asserts that a coaxial cable 10 suggests a connecting sleeve which includes both an outer, electrically conductive surface, and an inner, electrically conductive surface. Applicants respectfully disagree.

Distinctions over Mayer

A typical coaxial cable includes a braided outer conductor surrounded by an insulation material. Coaxial cables may further include a single or dual inner conductor system to carry varying potentials. The purpose of the braided outer conductor may be to provide protection against one or more inner conductors which may carry a high voltage potential, as well as shielding when used in varying applications. It is clear to one of ordinary skill in the art, that the

inner conductor(s) of a typical coaxial cable may provide a conductive path for electricity to flow. Furthermore, it is also clear to one of ordinary skill in the art that the braided outer conductor is enclosed by a subsequent or additional insulating material to isolate the shielding conductor from the outer surface of the coaxial cable. It is also very clear that a typical coaxial cable is a solid cable with an insulating outer surface.

As such, Mayer cannot disclose or suggest a “connecting sleeve ... that is in the form of a tube” as recited in independent claim 1 (emphasis added). Furthermore, it is clear that Mayer cannot disclose or suggest “an outer, electrically conductive surface that is grounded, and an inner, electrically conductive surface” as recited in independent claim 1 (emphasis added). Thus, the limitations of claim 1 cannot read upon the coaxial cable of Mayer.

Furthermore, it is quite clear from an expanded view of a typical coaxial cable (Mayer, FIG. 1, elements 10-14), that the inner conductor is completely isolated from the outside world. Therefore, Mayer cannot disclose or suggest “a coupling electrode that is embedded in the isolating material” as recited in independent claim 1.

Moreover, independent claims 6 and 7 have somewhat similar limitations to those set forth above with regard to independent claim 1 (although these claims should be examined for the merits contained therein). As such, for at least somewhat similar reasons (noting that claims 6 and 7 should be interpreted solely upon limitations present therein) Mayer cannot disclose or suggest the limitations of both independent claims 6 and 7.

Similarly, claims 2-5, dependent upon independent claim 1, are likewise patentable over Mayer at least for the reasons given above with regard to independent claim 1.

Mayer and Maxwell

The Examiner admits that “Mayer does not specifically disclose that the voltage potential applied to the inner electrically conductive surface is from a bus bar” (Office Action, pg 5).

However, the Examiner asserts that Maxwell discloses a bus bar for applying voltage to an inner conductive surface. Applicants respectfully disagree.

As discussed above, Mayer does not disclose or suggest an inner conductive surface, outer conductive surface, connecting sleeve, or any other limitation of claim 1. Furthermore, a cursory review of Maxwell reveals that Maxwell merely discloses a self-grounding electrical connector for the direct connection of a three wire electrical cable system. Therefore, any of the limitations discussed above with regard to independent claim 1 DO NOT READ ON Maxwell.

Therefore, even assuming *arguendo* that the reference teachings could be combined (which is not admitted for the reasons below), Maxwell would still not make up for any of the deficiencies discussed above with regard to independent claims 1, 6, and 7.

No Motivation to Combine

Applicants submit that the Examiner fails to establish a *prima facie* case of obviousness. The mere statement that Maxwell and Mayer could be combined or modified does not render the resultant combination and modification obvious to one of ordinary skill in the art unless Mayer or Park also suggests the desirability of the modification and combination. Applicants submit that it does not.

To establish obviousness based on a combination or modification of elements disclosed in the prior art there must be some motivation, suggestion, or teaching of the desirability of making the specific combination or modification that was made by the Applicants. The motivation or suggestion teaching may come explicitly from one of the following:

- A. The statements in the prior art (patents themselves)
- B. The knowledge of one of ordinary skill in the art, or in some cases,

C. The nature of the problem to be solved.¹

In order to establish a *prima facie* case of obviousness under 35 USC § 103, the Examiner must provide particular findings as to why the modification and combination is obvious. The mere statement that “a person of ordinary skill in the art would find it obvious at the time the invention was made to modify” is **insufficient**. The Examiner should examine the claims based on the merits therein, and provide particular findings if any limitation is allegedly *obvious*.

Therefore, for all of the reasons discussed above, independent claims 1, 6, and 7 are patentable over Maxwell and Mayer, alone or in any combination.

As such, claims 2-5 dependent upon independent claim 1, are likewise patentable over Mayer and Maxwell at least for the reasons given above with respect to independent claim 1.

Applicants respectfully request that the Examiner withdraw this art grounds of rejection.

Claim Rejections-35 USC § 103 (Kohler and Maxwell)

Claims 1-4, 6, and 7 stand rejected under 35 USC 103A as being unpatentable over Kohler (US 4,074,193, hereinafter Kohler) in view of Maxwell. Applicants respectfully traverse this art ground of rejection.

Kohler

Kohler is directed to a current and voltage measuring apparatus containing a body of casting resin 1 which is provided with ribs 2 to lengthen the surface leakage path. The casting resin body 1 is penetrated by a primary conductor 3 to which the voltage to be measured is applied and which carries the current to be measured as well. Further embedded in the casting resin body 1 is a cylindrical electrode 4 which forms a capacitor with the primary conductor 3.

¹ C. Dembiczak, 50 US PQ at 1614 (Federal Circuit, 1999).

Kohler further discloses the use of a winding 18 without a ferrous core and at least one device 19 which contains a ferrous core 20 with winding 21.

Therefore, Kohler discloses a casting resin body 1 with ribs and different types of conductors and other materials (e.g., windings 18, device 19) embedded therein.

As such, it is clear that Kohler cannot disclose or suggest at least a “connecting sleeve ... that is in the form of a tube” as recited in independent claim 1.

Furthermore, Kohler merely discloses embedded cylindrical conductors within a resin body. Therefore, it is clear that Kohler cannot disclose or suggest “an outer, electrically conductive surface that is grounded, and an inner, electrically conductive surface” as recited in independent claim 1.

Even further, it is quite clear from FIG. 1 of Kohler, that the inner winding 18 is simply a winding, nothing more. Therefore, Mayer cannot disclose or suggest “a coupling electrode that is embedded in the isolating material” as recited in independent claim 1.

Moreover, independent claims 6 and 7 have somewhat similar limitations to those set forth above with regard to independent claim 1 (although these claims should be examined for the merits contained therein). As such, for at least somewhat similar reasons (noting that claims 6 and 7 should be interpreted solely upon limitations present therein) Kohler cannot disclose or suggest the limitations of both independent claims 6 and 7.

Furthermore, claims 2-5 dependent upon independent claim 1, are likewise patentable over Kohler at least for the reasons given above with regard to independent claim 1.

Kohler and Maxwell

The Examiner admits that “Kohler does not specifically disclose that the voltage potential applied to the inner electrically conductive surface is from a bus bar” (Office Action, pg 7).

However, the Examiner asserts that Maxwell discloses a bus bar for applying voltage to an inner conductive surface. Applicants respectfully disagree.

As discussed above, Maxwell cannot disclose or suggest the limitations of independent claim 1.

Furthermore, Maxwell does not make up for any of the deficiencies discussed above with regard to Kohler (even assuming *arguendo* that they could be combined).

No Motivation to Combine

Moreover, Applicants submit that the Examiner again fails to establish a *prima facie* case of obviousness, the mere statement that Maxwell and Kohler could be combined or modified does not render the resultant combination and modification obvious to one of ordinary skill in the art unless Maxwell or Kohler also suggests the desirability of the modification and combination.

As discussed above, the Examiner should examine the claims based on the merits therein, and provide particular findings if any limitation is allegedly *obvious*.

Therefore, for all of the reasons discussed above, independent claims 1, 6, and 7 are patentable over Kohler and Maxwell, alone or in any combination.

As such, claims 2-5 dependent upon independent claim 1, are likewise patentable over Kohler and Maxwell at least for the reasons given above with respect to independent claim 1.

Applicants respectfully request that the Examiner withdraw this art grounds of rejection.

CONCLUSION

Accordingly, in view of the above amendments and remarks, reconsideration of the objections and rejections and allowance of each of claims 1-10 in connection with the present application is earnestly solicited.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicant(s) hereby petition(s) for a one (1) month extension of time for filing a reply to the outstanding Office Action and submit the required \$120 extension fee herewith.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Donald J. Daley at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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